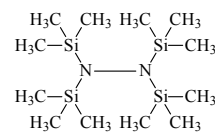


914
ED $C_{12}H_{36}N_2Si_4$

Tetrakis(trimethylsilyl)hydrazine

 D_2

r_a	\AA^a	θ_a	deg a
N–N	1.433(16)	Si–N–Si	124.1(15)
Si–N	1.759(5)	C–Si–C	108.8(7)
Si–C	1.875(2)	Si–C–H	109.2(8)
C–H	1.116(5)	Si–N–N–Si b	86.9(38)
		N–N–Si–C b	–5.0(27)
		N–Si–C–H b	180.0 c
		tilt[Si(CH ₃) ₃] d	4.6(11)



Local C_{3v} symmetry was assumed for the methyl groups. $Si(CH_3)_3$ groups were assumed to be identical, each having local C_3 symmetry. HF/6-31G* calculations confirmed that D_2 overall symmetry is favored.

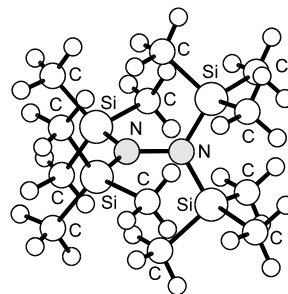
The nozzle temperature was 438 K.

a) Estimated standard errors.

b) Torsional angle, 0° for the *syn* position.

c) Assumed.

d) Tilt angle of the $Si(CH_3)_3$ group between the local C_3 axis and the adjacent Si–N bond; a positive tilt represents tilting of two adjacent groups away from one another.



Brain, P.T., Irving, I.A., Rankin, D.W.H., Robertson, H.E., Leung, W.-P., Bühl, M.: J. Mol. Struct. **413–414** (1997) 545.